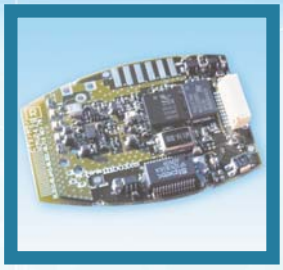
brainboxes
www.brainboxes.com

EST 1984

ISO9001 REGISTERED COMPANY

Elektra 05 European Electronics Industry Awards WINNER Manufacturer of the Year

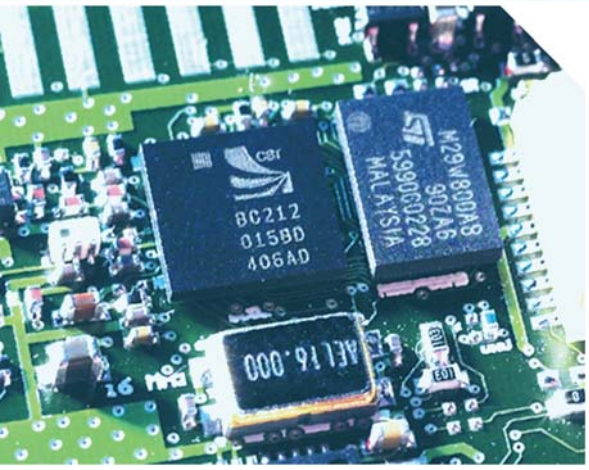
Microsoft CERTIFIED Partner



# BL-521 & BL-730

# CLASS 1 RS232 BLUETOOTH ADAPTOR

'WIRELESS SOLUTIONS ENGINEERED TO EXCEED EXPECTATIONS'



## Features

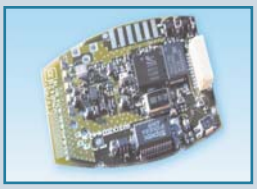
- Class 1 Bluetooth device operating at 14dBm
- Suitable for ANY device with serial port
- Handshaking CTS/RTS & DTR/DSR
- Range, Office: 20m Field: 200m subject to local environment conditions
- Integral Antenna
- Upgradeable onboard flash memory for latest Bluetooth Features
- 4 ways to Configure
- Up to 1.0 Megabaud RS232
- 9 Pin female adaptor included

Click on each feature to find similar products

## Options

Class 1 RS232 Bluetooth adaptor: BL-521

Class 1 RS232 Bluetooth converter Module for OEM: BL-730



Bluetooth

Class 1 devices see: BL-830 and BL-819

## Description

Award winning Brainboxes RS232 Adaptor allows any device with an RS232 port to communicate with another Bluetooth device without the need for any additional software.

Ideal for Bluetooth enabling 'dumb' RS232 devices such as dataloggers etc. Based on fully tested Bluetooth silicon, allowing communications at the full Bluetooth data rates. Integral Antenna.

**This class 1 Bluetooth device operates at 14.4dBm, making it one of the leading Bluetooth RS232 Adaptors in the market today.**

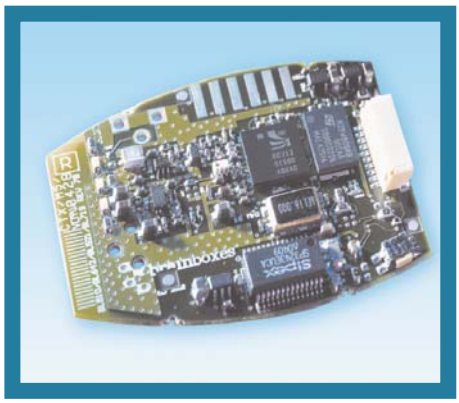
## Software

Four configuration modes tailored to suit every environment:

- Configuration Utility (for Windows)
- Remote Configuration Over Bluetooth Link
- Command line Configuration
- Bulletin Board Configuration

Also included full product documentation and troubleshooting guide.

Find out about Brainboxes excellent Configuration Utility Software Features: Click Here



Windows IT Pro SQL Server Best Microsoft Tech-Ed 2005 Europe WINNER

LIFETIME SUPPORT

Bluetooth™

CE FC FEDERAL COMMUNICATIONS COMMISSION USA UL

## ORDER

| Description | Code |
|---|---|
| CLASS 1 BLUETOOTH RS232 ADAPTOR | BL-521 |
| CLASS 1 BLUETOOTH RS232 CONVERTOR MODULE | BL-730 |

brainboxes
www.brainboxes.com

EST 1984

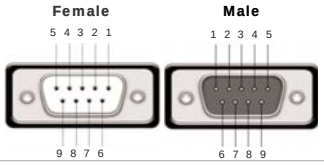
Elektra 05 European Electronics Industry Awards WINNER Manufacturer of the Year

# BL-521
# BL-730

# CLASS 1 BLUETOOTH RS232 ADAPTOR

| Product Code | BL-521 & BL-730 |
|---|---|
| **Bluetooth General** | |
| Bluetooth Qualification | 1.2 Qualified |
| **Bluetooth Radio** | |
| Class Of Device | Class 1 |
| Radio Frequency | 2.4GHz |
| Integral Antenna | Yes |
| Output Power | Qualified at 14 dBm |
| Operating Distance (Typical) Metres* | Field: 200m Office: 20m |
| **Bluetooth Settings** | |
| Max Transfer rate (Kb/s) | up to 723 |
| Configurable Local Device Name and Device Class | Yes |
| Pairing Options | Enable/disable/link key expiry/2 proximity modes |
| Client and Server Mode | Yes |
| Configurable Discoverability, Security mode and PIN number | Yes |
| PICONET & SCATTERNET capable | Yes |
| PARK and SNIFF mode | Yes |
| Factory Reset | Yes |
| **Serial Port Settings** | |
| Baud Rate (Kb/s) | 244 - 1,000,000 |
| Data Bits | 8 |
| Parity | Odd, Even, Mark Space |
| Stop bits | 1 or 2 |
| Flow Control | RTS/CTS , DTR/DSR |
| **Bluetooth Security** | |
| Encryption | 'None' , 'Point to Point' or 'Point to Point and Broadcast' |
| PIN Authentication | PIN: Select from list or enter custom (16 character limit) |
| Security Levels | Low, Medium & High (Security Mode 1,2 & 3) |
| **General** | |
| Power Source | External Power Device: 200mA @ 5V |
| LED's | status LEDs: Power, Tx, Rx |
| Power Consumption | Depends on usage, more info CLICK HERE |
| Weight | 68g |
| Size WxDxH (mm) | 40 x 80 x 22 (plus 180mm cable and connector) BL-521<br>34 x 44 x 2 BL-730 |
| RS232 connector | 9 pin male (female adaptor supplied) |
| **Interface** | |
| OS Compatibility | This device is compatible with any product with a serial port |
| Configuration | Windows Utility software or Remote/terminal Config |

| Female | | Male |
|---|---|---|
| Pin 1 | N/C | N/C |
| Pin 2 | TXD | RXD |
| Pin 3 | RXD | TXD |
| Pin 4 | DSR | DTR |
| Pin 5 | GND | GND |
| Pin 6 | DTR | DSR |
| Pin 7 | CTS | RTS |
| Pin 8 | RTS | CTS |
| Pin 9 | N/C | N/C |




| | | |
|---|---|---|
| **Awards** | Windows IT Pro SQL Server Best Tech Ed 2005 Europe WINNER | **Winner Microsoft Tech Ed 2005, Mobile Computing Europe:**<br>Bluetooth CompactFlash and Bluetooth Serial Connectivity<br>**Winner 2005 European Electronics Industry Awards:**<br>Manufacturer of the Year |
| **Approvals & Accreditations** | CE FC UL | UL, CE, FCC, Bluetooth Approved<br>(not BL-730, approval required for integrated systems) |
| **Box Contents** | | Bluetooth RS232 Adaptor (BL-521) / Bluetooth RS232 convertor module<br>Power Supply (BL-521) Shell connector and crimps (BL-521)<br>CD with Utility software, manual, troubleshooting guide and datasheet<br>Quick Start Guide |
| **OEM option** | | Available for bulk buy OEM |
| **Product Support** | | Lifetime Email and Phone Support<br>from fully qualified, friendly staff 40 hours a week |
| **Warranty** | | 3 years |
| **Made In** | MADE IN EU<br>Elektra 05 European Electronics Industry Awards WINNER Manufacturer of the Year | Manufactured in the UK by Brainboxes<br>**Winner 2005 European Electronics Industry Awards**<br>Manufacturer of the Year |
| **Customisable** | | Brainboxes operate a "Perfect Fit Custom Design"<br>policy for volume users More Info: CLICK HERE |

For Comprehensive Technical Specification Click Here

*Subject to Local Environment Conditions

brainboxes
www.brainboxes.com

EST 1984

Elektra O5 European Electronics Industry Awards WINNER Manufacturer of the Year

BL-521
BL-730

# CLASS 1 BLUETOOTH RS232 ADAPTOR

## Glossary: Product Features Explained

### Bluetooth RS232 Adaptor Configuration Utility

Brainboxes Bluetooth RS232 Adaptors have 4 ways to be configured: Configuration Utility, Bulletin Board, Remote Config or Command Line. Shown here is the our simple yet complete Configuration Utility, which allows full customisation of a Brainboxes Bluetooth RS232 Adaptor.

Usability that speaks for itself

### Bluetooth Device Class

There are 3 classes of Bluetooth device defined to suit different needs:

**Class 1 - Long Range**

Maximum Output Power of 100mW (20dBm)

**Class 2 - Medium Range**

Maximum Output Power of 2.5mW (4dBm) most common

**Class 3 - Short Range**

Maximum Output Power of 1mW (0dBm) very rare

A value of distance cannot be explicitly stated for each device class; every user environment is slightly different, and affects the signal in different ways. The best way to compare devices operating range is by comparing Output Power. A device with a larger output power will be able to communicate with other devices over a further distance. Most Brainboxes devices are class 1 devices with a very powerful Power Output, Brainboxes Bluetooth Class 1 devices have one of the most powerful Bluetooth radios in the industry - 14dBm!

brainboxes
www.brainboxes.com

EST 1984

Elektra 05 European Electronics Industry Awards WINNER Manufacturer of the Year

BL-521
BL-730

# CLASS 1 BLUETOOTH RS232 ADAPTOR

## Brainboxes' Service

*"Brainboxes offers free lifetime support for ALL customers."*

We aim to provide industry leading support for our customers. Our highly trained and helpful support engineers sit and work closely with the product designers, developers, and testers to ensure an in-depth knowledge of the products. Support can be found by emailing support@brainboxes.com or calling: +44 (0)151 220 2500 during UK office hours.
Support website: www.brainboxes.com/support/index.asp

*"Brainboxes offers 3 year 'no quibble warranty' on all Bluetooth products."*

If, for whatever reason, your Brainboxes Bluetooth device does become dysfunctional Brainboxes are happy to replace it thanks to our "3 year no quibble warranty". Peace of mind for your investment.

## Brainboxes' Kaizen

*"Brainboxes constantly strives to achieve higher standards for the benefit of customers."*

'Kaizen' is a Japanese term meaning 'continuous improvement'. Kaizen has been implemented throughout Brainboxes, resulting in significant improvements to our products and our customer service, as illustrated by the development of our own custom ASIC "LYNX" and our new lifetime warranty. As part of this ongoing process, in 2004 we embarked on 'Lean' and '6 Sigma' programs which are successfully increasing productivity and efficiency in all areas of the company. **More Info:** Click Here

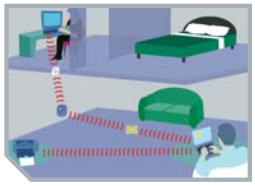
## What Can I do with Bluetooth?

Bluetooth makes the sharing and exchange of information between mobile or static devices as simple as possible. Whether at home, on the move, or in the office it can be used for networking, sharing files, synchronizing information, email, Internet access, printing, and more. In industry it can be used to wirelessly control equipment and machinery - perfect for servicing inaccessible devices.

Connect **wirelessly** to a Bluetooth printer to easily **print** copies of your documents

Use Bluetooth in test or manufacturing to **control and monitor equipment**

Create instant **ad-hoc networks** to share files and information



Connect to the **Internet** from anywhere at **home** via a Bluetooth broadband modem

**Email** anywhere by connecting your laptop or Pocket PC to your Bluetooth phone